

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

AIR AND RADIATION DIVISION

77 West Jackson Boulevard
Chicago, Illinois 60604

DATE: APR 21 2014

SUBJECT: Inspection Report for Land and Lakes Company, Chicago and Dolton,
Cook County, Illinois

FROM: Manoj P. Patel, Environmental Engineer *MP*
Air Enforcement and Compliance Assurance Section (MI/WI)

THRU: Sarah Marshall, Chief *SM*
Air Enforcement and Compliance Assurance Section (MI/WI)

TO: File

Facility: Land and Lakes Company

Location: 2000 East 122nd Street, Chicago, Illinois
138th Street and Cottage Grove Avenue, Dolton, Illinois

Inspection Date: March 26, 2014

Inspection Team: Manoj P. Patel, EPA
Letuchy Alexandra, EPA

Inspection Attendees: Charlene J. Troyer, Environmental Compliance Manager, Land
and Lakes Company
Michael G. Swiatowiec, Director of Engineering, Land and Lakes
Company
Raul Hernandez, Pump Technician, Land and Lakes Company
Paul Maly, Illinois Environmental Protection Agency

Purpose of Inspection

To investigate, inspect, and determine whether the Land and Lakes Company is in compliance with the Illinois State Implementation Plan (SIP) requirements and/or Federal Clean Air Act regulations.

Facility Background

Land and Lakes Company (the facility) consists of two waste disposal sites (one active

and one inactive) and associated landfill gas collection and control systems. The Harborview landfill located at 2000 East 122nd Street, Chicago, Illinois, in an inactive municipal solid waste (MSW) landfill owned by the Stoney Island Reclamation and operated by the Land and Lakes Company. The Harborview facility encompasses approximately 79 acres with the waste boundary of 61 acres.

The facility is divided into 6 sub-units (i.e., phase 1 through 6). The last date of the waste at this facility was on or about October 15, 1998 and the landfill was closed in 2002 and the top cover was placed. An MSW landfill may also receive other types of RCRA Subtitle D wastes under 40 CFR § 257.20 such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste.

The landfill gases are generated through the decomposition of the MSW deposited in the landfill. The active gas collection system collects the active gas which mainly contains methane, carbon dioxides, and a small percentage of nonmethane organic compounds (NMOC). Landfill gases are burned in the continuous mechanical air-assisted flare and air emissions are exhausted into the atmosphere. The facility has recently shut down the adjacent energy plant that used landfill gas to generate the electricity.

Inspection Details

On March 26, 2014, Alexandra Letuchy and I arrived at the facility at approximately 10:10 AM. We were greeted by the Charlene J. Troyer and Michael G. Swiatowiec of the facility, and Paul Maly of IEPA. We showed the Environmental Protection Agency credentials and explained the purpose of the federal-led investigation. We also stated that Paul Maly has been invited by EPA. Mike informed us that the facility does not have any conference room so he would directly take us to the landfill site where the flare is located.

We drove towards the flare site. An active landfill gas collection and control system has been installed since 1997 in order to minimize landfill gas migration and to generate electricity from the landfill gas. The gas transmission piping system includes condensate collection sumps and knockouts to prevent pipe blockage. The landfill also has a leachate collection system. The gases are collected in the wells and are transported into the common header. The common header sends the gases to the blower. The compressor compresses the gases from the blower and sends them to the flare where they are burned. The goal for the flare is to operate twenty-four hours a day, seven days a week. The facility monitors the flow of the gas, methane content, and temperature of the gas sent into the flare. We observed the following parameters at the flare site:

Gas Flow: 20914 SCF and 344.8 SCFM
Blower Motor Power: 20 HP
Gas Temperature: 60 F
Gas Pressure: - 30 H₂O WC

We then requested to observe the top of the landfill area. We were instructed to follow the facility vehicle. Paul Maly drove us to the top of the landfill and we observed the composting work being carried out on the top soil of the facility. We smelled strong odors on the top of the landfill during the cold day. We walked to the well #55 and the pump technician explained how routinely he monitors for pressure and adjusts valves so that the inlet maintains the pressure into the common header. A portion of the gas collection system separates the condensate from the gas collected and transports any liquid directly to the landfill's leachate collection system.

We then drove back to the gate. We informed the facility personnel and left the Harborview landfill. We then drove to the 138th Street and Cottage Grove Avenue facility located in Dolton, Illinois.

The design capacity of both landfill sites combined is 9,134,371 Megagrams. The Dolton facility is known as River Bend Prairie facility. The opening conference began around 11:15 am, after various Land and Lakes facility employees joined the discussion (listed under the facility attendees heading). During the opening conference, we stated that this was an announced inspection led by EPA, and the IEPA had accepted an invitation to participate. We informed the facility personnel about any business confidential information.

The facility stated that it does not accept any appliances or automobile parts. The mechanical air-assisted flare functions the same way as the Harborview facility. The facility installed the flare and the gas collection system in or around 1998. The flare was relocated to the eastside of the active sub-section of the landfill. The facility had an on-site electrical generator to support the flare operation. The goal for the flare is to operate twenty-four hours a day, seven days a week; however, occasionally power outages occur and the flare will automatically shut down. According to the facility, when the flare shuts down, all the landfill gas in the system stays in the piping until the flare's flame is ignited again. The landfill gas is not allowed to escape out the top of the flare due to a lock system, nor does the gas migrate back into the landfill due to pressure built up in the piping. The flare unit actively adds air through vents at the base of the unit. The air assistance is not forced, since no fans are used.

The facility stopped collecting any asbestos material beginning February 28, 2014. A third party contractor performs the visible emissions observations but the facility does not know the frequency of the visible emissions observations. EPA requested the copy of the monitoring report. The facility stated that it does not have a continuous data monitoring so the technician comes out to take monthly readings at the flare. The facility personnel drove us to the top of the landfill where the active subsection is. There were several employees working. We observed heavy equipment installing new gas wells and plastic pipes.

The facility uses water trucks to spray water on the soils to minimize the fugitive particulate emissions. We visited the recycling area in the transfer point and observed two employees separating solid wastes into their respective containers.

Documents Reviewed:

We discussed the permitting history and the stack testing at the facility. We were informed that all records are kept at the Rosemont, Illinois headquarters.

Closing Conference

EPA concluded the inspection at around 12:50 PM CST. We stated that the investigation was not yet complete (i.e. records review, permit review, emissions data review, etc.). I also stated EPA's policy regarding the handling of confidential business information (CBI) and asked if Land and Lakes wanted to claim any information provided or processes shown as CBI. The facility marked some production capacity as CBI. I stated an inspection report would be prepared and the report may be available via the Freedom of Information Act. Based on the information and records review, EPA may issue a Section 114 Request of Information to seek further information to make a compliance determination of the facility.

Document Collected from Inspection:

- Flare location on the Land and Lakes Landfill at Dolton, Illinois

Document Requested with the Facility:

- Summary of the latest stack tests at flares at both facilities
- Latest report on flare monitoring prepared by consultant
- Latest analysis of NMOC concentration determination under NSPS
- SO₂ exceedance in 2008, Increased emission limits